



Black Warrior RIVERKEEPER®



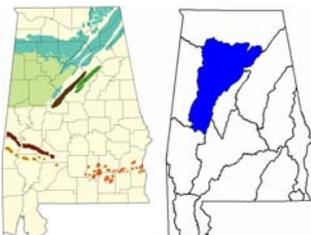
B L A C K W A R R I O R R I V E R K E E P E R ' S N E W S L E T T E R

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DID YOU KNOW?

Most of Alabama's Coal reserves are found in the Black Warrior River Basin. In the cover story, our Legal Program Coordinator, John Kinney, explains the ramifications of coal's abundance in our basin. Note the similarity between maps of Alabama's coal reserves (left) and the Black Warrior Basin (right)



ADEM Favors Coal Mines Over Water Quality

To clean up the mining industry in the Black Warrior River Basin, Riverkeeper and other organizations face long odds due to the geology of the region and the brazen attitude of coal companies and their regulators. The Black Warrior Basin is situated in the middle of Alabama's most expansive coal field. A majority of Alabama's coal mining takes place along the Black Warrior and its tributaries.

Indeed, Riverkeeper faces not only natural hurdles, but also an industry which tends to enjoy unbridled profits at the expense of health, safety, and ecology. Riverkeeper members in Cordova protested against Drummond and were told that dissenters will not stand in the company's way. Drummond appears to value profits over worker safety as well. Their executives face racketeering charges in Colombia and wrongful death suits in a U.S. court related to the murder of two Colombian union leaders. Drummond was also forced to shut down its Shoal Creek Mine (Jefferson Co.) because the mine's methane jeopardized workers.



*Horse Creek Mine in Walker County threatens the Mulberry Fork with erosion and heavy metals. Such mines' violent, dusty blasting also creates a substantial nuisance for nearby homes.
© Nelson Brooke. Flight provided by SouthWings.org*

Perhaps the biggest obstacle in reducing mine pollution is Alabama's rubber stamp permitting program that favors powerful mining companies over the water quality that the program was designed to protect. The Water Quality Criteria established by the Alabama Department of Environmental Management (ADEM) prohibits "sewage, industrial wastes or other wastes [from causing] the pH to deviate more than one unit from the natural pH, nor be less than 6.0, nor greater than 8.5." This particular criterion applies to streams with a use classification of Fish and Wildlife. However, ADEM routinely issues permits to coal mines in the Black Warrior Basin that allow discharges with pH as alarmingly high as 10.5 to Fish and Wildlife streams. In addition, these permits are extremely lax, allowing for numerous exceptions for settleable solids and metals such as iron during rain events.

ADEM also turns a blind eye to known polluters by reissuing numerous permits to coal mines routinely in violation of their permit parameters. Such was the case with Treadway, Inc.'s Fancy Lump Mine on Cane Creek in Walker County. Permit violations contributed to the creek's impairment by metals, pH, and siltation. When Riverkeeper brought this fact to ADEM's attention as part of public comment on the permit's reissuance in June 2006, ADEM gave no reply and presumably reissued the permit.

The fate of Daniel Creek in Tuscaloosa County is another example of ADEM's ineptitude and willingness to ignore water quality problems. In 2006, ADEM added the creek to the state's list of impaired water bodies due to elevated conductivity. However, ADEM overlooked a sedimentation problem in the creek that was created by coal mine discharges, is apparent to even casual observers, and has been documented by the Army Corps of Engineers. Riverkeeper raised this issue with ADEM during public comment. The fact that ADEM ignored our pleas and left Daniel Creek off of the impaired waters list indicates that the agency has no plans to address the problem, even though a sediment bar dangerously protrudes into the main navigational channel of the Black Warrior.

Despite these challenges, Riverkeeper's new strategic plan lists monitoring coal mining as one of its top priorities. We plan to track the industry by water in our patrol boat, by air through flights provided by SouthWings, and through file reviews at ADEM.

RIVERKEEPER® Investigates Historic Black Warrior Fish Kill

A massive fish kill occurred on the Black Warrior River in late September. Dead fish were first reported to authorities on September 24th and were found dying or dead throughout a twenty mile stretch of the river between Moundville and Akron. A large plume (compressed slug of bad water) associated with the fish kill was reported to have extremely low levels of dissolved oxygen. This plume was killing fish through September 26th.

Jerry Moss, a fisheries biologist with the Alabama Division of Wildlife & Freshwater Fisheries (ADWFF), conducted a survey of the dead fish and conservatively estimates that over one million fish died. The majority were threadfin shad, but also killed were skipjack herring, bream, bass, crappie, freshwater drum, smallmouth buffalo, sucker, catfish up to thirty pounds, and a few American eel. Nelson Brooke, your Riverkeeper, observed dead fish along the river's banks and bald eagles, ospreys, hawks, vultures, ravens, egrets, and herons feeding on the kill. The smell of decaying fish was hard to escape.

Brooke is talking with citizens, the ADWFF, the Alabama Department of Environmental Management (ADEM), and the Army Corps of Engineers. The ADWFF and ADEM have publicly attributed natural causes. ADEM is analyzing water and fish, but has not released results. Both agencies say their studies have only shown low oxygen results.

At this point there are many possibilities as to what may have caused this fish kill. Alabama was experiencing a fifty year drought, low flows were being passed through dams upstream, and a very large rain occurred the night before the kill. This rain was the "first flush," meaning that all the contaminants which had been settling onto the ground and impervious surfaces over prior months were washed into the river all at once in relatively large concentrations. Industries sometimes "open the hatches" during large rain storms, and wastewater ponds and sewer lines often overflow. Some believe that aerial crop spraying caused the kill while others cite a benzene barge parked by Moundville on September 24th.



The largest fish kill recorded on the Black Warrior.
© Michael E. Palmer, Tuscaloosa News

Reports of a new biodiesel

plant in Moundville dumping vegetable oil and glycerin into the river have been pretty consistent since June. The City of Moundville reported a 40,000 gallon unpermitted discharge from its sewage lagoon on September 23rd (which they are now denying) and the City of Tuscaloosa reported between 12,000 and 50,000 gallons of raw sewage spilled from Lift Station #3 on September 25th. ADEM's scientists have ruled out sewage as the cause of the kill. It is believed that Holt Lake and Oliver Lake upstream "turned over" and caused the oxygen depletion. A theory being passed around is that sloughs and wetlands, cut off from the river's main channel by silt and low water, contributed large amounts of oxygen depleted water after the rain.

Lacking definitive evidence, Riverkeeper cannot yet determine a cause, but one can infer that the kill resulted from a combination of the aforementioned possibilities. We are investigating what caused this fish kill and who, if anyone, is responsible. This is the largest fish kill recorded on the Black Warrior.



Fisheries Biologist Jerry Moss estimates that over a million fish died in the fish kill.
© Janalie Graham, U.S. Army Corps of Engineers.

In Memory of Shane Hulsey, a Real American Hero

Alabama lost a hero on October 20, when Cahaba River Society's Education Director, Shane Hulsey, died in a kayaking accident at Little River Canyon. Survived by his wife Alison, Shane was a longstanding member of Black Warrior Riverkeeper and a dear friend to many of our staff and supporters. During his countless kayaking trips in the Black Warrior Basin, Shane was incredibly vigilant, often contacting us with pollution tips. Through Cahaba River Society's CLEAN program, Shane took over 10,000 people out on the water — people of all ages and walks of life, mostly students and teachers. Shane himself was a most influential teacher, as his classroom was the outdoors of Alabama, "The River State." To paraphrase 19th Century philosopher Henry Adams, a teacher may never know the extent of his influence, because a teacher affects eternity.

Shane Hulsey (right, front) teaching children how to seine on the Black Warrior River's Locust Fork. © Nelson Brooke



Nelson Brooke's Black Warrior RIVERKEEPER® Patrol Log

Here is a chronological summary of just a few of the many activities that Nelson Brooke, your Black Warrior Riverkeeper, performed recently as watchdog and spokesman of the Black Warrior River watershed. To report pollution to Nelson, please call our office at (205) 458-0095 or e-mail: NBrooke@blackwarriorriver.org. For more information, visit www.BlackWarriorRiver.org

September 20: Flew over parts of the Locust and Mulberry Forks to the West of Birmingham. We were mainly looking at coal strip mines like Red Star Mine, Quinton Mine, and Horse Creek Mine along the Mulberry Fork. We flew over at least five other mines, a coal preparation plant, Gorgas and Miller Steam Plants, a quarry, and some "reclaimed" mines. I took many photos of these operations along the river's tributaries.

October 3: Went along for the release of 31,000 endangered plicate rocksnails (*Leptoxis ampla*) to the Locust Fork in Blount County. The snails were raised at the Alabama Aquatic Biodiversity Center www.outdooralabama.com/programs/aquatic.cfm. Although these snails have been released into the Locust Fork before, this was the first release made in the state by the newly established center. The center will propagate endangered species such as snails and fish and release them into high quality habitats. Plicate rocksnails require clean water to live.

October 10: Went to the Friends of the Locust Fork's public meeting on the Hwy. 79 bridge construction project over the Locust Fork in Blount County. Over 40 people were present, including representatives from the Alabama Department of Transportation and Alabama Bridge Builders, the contractor. ALDOT told everyone that this was the first meeting like this for ALDOT's Third Division. Sergio Ruiz of Cordova gave a presentation about Alabama Water Watch testing techniques for detecting sediment in runoff from construction sites, allowing people to learn about how they can help monitor. The majority of the evening was spent debating over river access and the right to use the river. The builder's insurance disallows any passage under the bridge during construction. The builder learned that by building a rip-rap access pad $\frac{3}{4}$ across the river he had backed up water, confusing the USGS stream gauge and causing the level reading to be inaccurate. People from all over the southeast would be showing up to paddle – unaware of the water level and the construction project. Paddlers should watch out for obstructions during high water. All agreed on working together to create a better launch / take-out for paddlers once the new bridge has been built. I asked questions about their sediment and erosion control measures for the project. They are mostly using silt fencing, rip-rap, and grass seed (the bare minimum). I asked if they would be using fiber mats, polymers, food grade lubricants for equipment over the water, or any other sound techniques. I hope ALDOT will realize the importance of embracing new erosion control practices. This will save money and clean up streams.

October 17: I busted the Birmingham Airport polluting Village Creek after last night's big rain. Extremely turbid water was hurtling out of the tributary coming from the airport's runway expansion project, making Village Creek muddy far downstream. The strong odor of fuel from the airport was present and white foam was standing in eddies. I took water samples and documented slope failures and erosion from the construction. I reported this to the Storm Water Management Authority (SWMA) and ADEM.

October 28: I received the Elton B. Stephens, Jr. Environmental Award at "Hilltop on the Green," the annual function for Mt. Laurel's Hilltop Montessori School, a LEED certified green building. www.usgbc.org/DisplayPage.aspx?CategoryID=19 The award honors Riverkeeper's community service and our commitment to sustainable use of resources.

October 31: The Jefferson County Commission pulled out of the Storm Water Management Authority at their commission meeting. This was a total disappointment. They complained about an overwhelming amount of e-mails regarding SWMA. Unfortunately they did not heed our call. In fact, commissioners Shelia Smoot and Larry Langford exhibited discontent with those who "joined the bandwagon" or were part of an "orchestrated" campaign. Apparently they do not feel that an overwhelming message from their constituents is compelling. Instead, they felt that such a response was insincere and not worth listening to. Smoot went so far as to say that people obviously had not formulated their own opinions or become personally acquainted with the facts, so she was not going to listen to them. This sort of defiance only leads to one conclusion: they already had made up their minds, and nobody — not even their constituents — could change that. Apparently our commissioners do not value clean water. SWMA provides a needed service that should not be done away with. The county will be wasting money re-inventing the wheel. They will have a hard time doing SWMA's job better and cheaper.

November 3: Patrolled the Mulberry Fork by boat. Red Star Mine is steadily eating away at the mountainside just upriver of Reed's Ferry in Walker County. People's homes up there are being showered by rocks from this mine. See cover page for more info about coal mines.

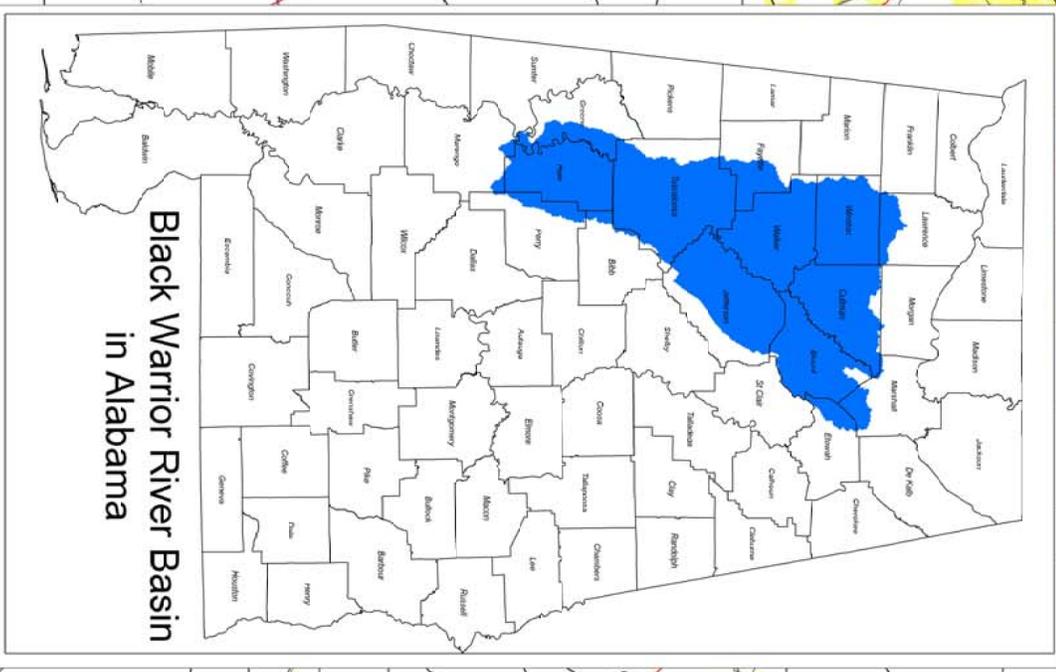
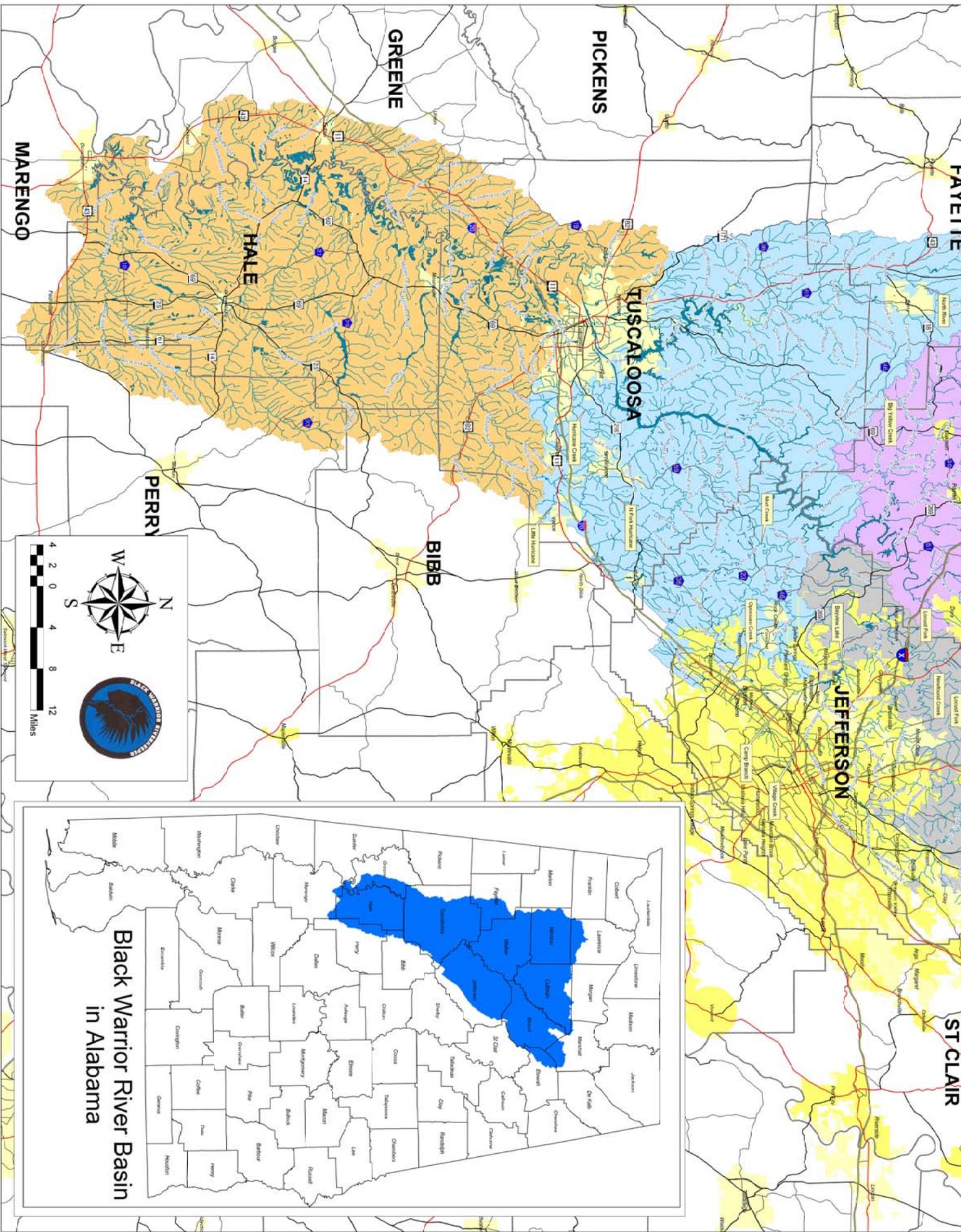
November 14: Checked out acid mine drainage (AMD) coming from an old gob pile next to the Locust Fork with Larry Barwick, field inspector for the Alabama Department of Industrial Relations. This pile is was generated by the underground Maxine Mine long ago. As water flows through this refuse it becomes acidic and pollutes the river with heavy metals. Mr. Barwick will determine the priority of this AMD site on their long inventory of sites requiring cleanup.



Red Star Mine next to the Black Warrior's Mulberry Fork in Walker County. © Nelson Brooke



Runoff from the Birmingham Airport's expansion pollutes Village Creek on October 17, 2006. © Nelson Brooke



**Black Warrior River Basin
in Alabama**

Black Warrior RIVERKEEPER® Legal Docket

NEW CASES

Riley Maze Creek WWTP (Marshall County)

As Riverkeeper continues our Waste Water Treatment Plant (WWTP) program, we frequently discover treatment plants that illegally dump large amounts of raw and inadequately treated sewage into the river. One such plant is the Riley Maze Creek WWTP, which is operated by the Arab Sewer Board of the City of Arab in Cullman County, Alabama. This facility discharges into an upper tributary of the Mulberry Fork of the Black Warrior River.

This plant is in serious violation. It is an aging system, treating more waste than it was designed to handle. It is designed for 0.8 million gallons per day (MGD) and a projected maximum flow of .25 MGD. For the past several years, the average daily flow has exceeded the projected maximum flow during many months. In the past five years, the system has experienced at least 40 unpermitted discharges of raw sewage in violation of the NPDES permit. It also had **331 violations** of the discharge parameters of its permit, mostly for total suspended solids (TSS) and Fecal Coliform. Riverkeeper served Notice of Intent to Sue (NOIS) on October 26, 2006 stating that we intend to sue this facility after the required 60 day notice period expires.



The Riley Maze WWTP in the city of Arab: 331 Clean Water Act violations and 40 illegal raw sewage discharges. © Nelson Brooke

ONGOING CASES

City of Moundville Lagoon (Hale County)

The City of Moundville in Hale County, Alabama, operates a small lagoon system for waste water treatment. This facility discharges directly into the Black Warrior River, downstream of the City of Tuscaloosa. Riverkeeper issued a NOIS on December 14, 2005 alleging **1,486 violations** of its NPDES permit! After the expiration of the 60 day notice period, we elected not to file suit because we had reason to believe that they were about to make necessary improvements to their facility and stop the discharge violations. However, after nearly one year, it is apparent that they are still in serious violation, having incurred an **additional 649 violations**. Riverkeeper served a second NOIS on November 17, 2006.



Moundville Lagoon discharges improperly treated sewage into the Black Warrior right next to the city's public boat launch and renowned archeological park. © Nelson Brooke. Flight provided by Southwings.org

City of Cordova WWTP (Walker County)

Cordova operates an aged treatment facility that had numerous failures over the past five years. They also had numerous pumping station failures, discharging hundreds of thousands of gallons of raw sewage into the Black Warrior's Mulberry Fork. Riverkeeper served a 60-day NOIS on September 30, 2005 alleging a total of **618 violations** of their NPDES permit under the Clean Water Act. The Alabama Department of Environmental Management (ADEM) filed suit against Cordova on November 9, 2005, in the state Circuit Court of Walker County, thus precluding the suit we planned in Federal Court. Riverkeeper filed a Motion to Intervene and a Complaint in Intervention on April 28, 2006, in the Circuit Court of Walker County. The case was set for non-jury trial on November 7, 2006. Cordova's attorney filed a motion to continue, which the Court granted. We expect this case to be re-set for trial shortly.



City of Cordova Waste Water Treatment Plant: 618 Clean Water Act violations. © Nelson Brooke. Flight provided by Southwings.org

About Black Warrior RIVERKEEPER®

Black Warrior Riverkeeper’s mission is to protect and restore the Black Warrior River and its tributaries. We are a citizen based non-profit organization dedicated to improving habitat, recreation, and public health throughout 16 counties in the heart of Alabama. Monitoring the watershed, educating the public, and holding major polluters accountable for their violations has made us an important proponent of clean water in our patrol area, the entire Black Warrior River Basin. Founded in 2001 by David Whiteside, our three full-time employees include Nelson Brooke—Riverkeeper (patrolman and spokesman), Charles Scribner—Director of Development, and Brantley Fry—Executive Director. We also benefit greatly from the services of in-house Chief Prosecuting Attorney, Mark Martin, and Legal Program Coordinator, John Kinney. Alabama’s 2006 Watershed Organization of the Year, Black Warrior Riverkeeper is governed by a board of directors and is a proud member of Waterkeeper Alliance.

About WATERKEEPER® Alliance

The first Riverkeeper patrol boat was launched by fisherman and their friends who mobilized in 1966 to challenge polluters on the Hudson River. That Riverkeeper’s contributions to the Hudson’s amazing recovery has inspired the creation of 153 locally funded and controlled “Waterkeeper” organizations on waterways across the country and the world. Waterkeepers (including Alabama’s Choctawhatchee Riverkeeper, Hurricane Creekkeeper and Mobile Baykeeper) patrol local waterways, respond to citizen complaints, and enforce environmental laws. Waterkeeper Alliance was founded in 2000 to connect and support local Waterkeeper organizations, while allowing them full control over their finances and administrative decisions. Waterkeeper Alliance offers legal, scientific, and administrative advice, provides networking opportunities, and often advocates for issues common to multiple local Waterkeepers (such as mercury pollution — a major issue in the Black Warrior River basin).

MEMBERSHIP FORM



Please complete and return with check to:

Black Warrior RIVERKEEPER®

712 37th Street South
Birmingham, AL 35222



NAME(S) (please list everyone in your household so they can all be members!)

ADDRESS: _____ CITY, ST, ZIP _____

PHONE: _____ EMAIL: _____

If you enjoy the Black Warrior River, its tributaries, or its Sipsey, Mulberry, or Locust Forks, please list how and where:

PLEASE CHECK A CATEGORY:

- ___ Redfin Darter\$25
___ Warrior Darter\$50
___ Tuscaloosa Darter.....\$100
___ Watercress Darter.....\$250
___ Vermilion Darter.....\$1000
___ Other dollar amount.....\$
___ In-kind donation (list donated items or professional services):
___ Volunteer time (list hours and type of volunteering):

To donate by credit card or to purchase merchandise (shirts, organic soap, hunting/fishing gear, DVDs) call 205-458-0095

Black Warrior Riverkeeper is a 501(c)(3) tax-exempt charitable organization. Your contribution is tax deductible to the extent allowed by law. No goods or services of monetary value will be provided in exchange for this contribution



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**A C K N O W L E D G M E N T S**

**Widespread support from The Altamont School**

Ten amazing high school students from The Altamont School each donated 24 hours of volunteer work for Riverkeeper during their September "Project Week." Their activities included calling mayors to protest irresponsible floodplain development, designing a cover for our Village Creek DVD, creating address databases, and removing litter from Turkey Creek. Senior **Robert Wilson** subsequently designated Riverkeeper as the beneficiary of his school's environmental club concert, which raised funds and awareness for our work. Robert and fellow students now collect used cell phones and ink cartridges for our new **Recycling Fundraiser**.



*Altamont students and Riverkeeper staff pose in front of litter they removed from Turkey Creek in Pinson (Jefferson County). © Susan Bijur*



**2 Realty Fundraisers for Black Warrior Riverkeeper**

**Carl and Marcia Montgomery**, Keller Williams Realtors, will give us 10% of their net commissions when Riverkeeper supporters buy or sell a home with them. Call them at 205-266-4039 and mention Riverkeeper. Their friends at Wells Fargo will donate \$300 if Riverkeeper supporters mention our name when closing a purchase or refinancing a loan with Wells Fargo. Contact **Joey Mure, Charlotte Machado,** or **Marty Finn** at 800-808-8009. We are honored that local representatives of leading businesses support our work for clean water!